

I claim:

1. A gaseous fuel pressure regulating system, comprising:

an inlet port;

5 a conduit connected in fluid communication with said inlet port;

an outlet port connected in fluid communication with said conduit;

an actuator;

a first valve disposed between said conduit and said outlet port, said first valve being operable to selectively inhibit or permit gaseous fuel to flow from said
10 conduit to said outlet port, said first valve being movable between a gaseous fuel flow inhibiting position and a gaseous fuel flow permitting position in response to movement of said actuator; and

a controller connected in signal communication with said actuator, said controller being configured to maintain a desired pressure magnitude at said outlet
15 port.

2. The regulating system of claim 1, wherein:

said controller is a microprocessor which is connected in signal communication with said actuator, said microprocessor being configured to
20 provide a signal to said actuator to control the movement of said first valve between said gaseous fuel flow inhibiting and said gaseous fuel flow permitting positions.

3. The regulating system of claim 2, wherein:

25 said signal is a pulse width modulated signal comprising a plurality of pulses.

4. The regulating system of claim 2, further comprising:

a pressure sensor disposed in pressure sensing relation with said outlet port, said pressure sensor being connected in signal communication with said microprocessor.

5

5. The regulating system of claim 4, wherein:

said signal is a function of a pressure magnitude within said outlet port.

6. The regulating system of claim 1, further comprising:

10 a second valve disposed in fluid communication between said inlet port and said conduit.

7. The regulating system of claim 6, wherein:

15 said second valve is configured to meter a flow of said gaseous fuel from said inlet port at a first pressure magnitude into said conduit at a second pressure magnitude.

8. The regulating system of claim 7, wherein:

20 said first valve is configured to meter a flow of said gaseous fuel from said conduit at said second pressure magnitude into said outlet port at a third pressure magnitude.

9 The regulating system of claim 8, wherein:

25 said controller is configured to maintain said third pressure magnitude generally equal to said desired pressure magnitude.

10. A gaseous fuel pressure regulating system, comprising:

an inlet port;

a conduit connected in fluid communication with said inlet port;

an outlet port connected in fluid communication with said conduit;

5 an actuator;

an inlet valve disposed in fluid communication between said inlet port and said conduit;

an outlet valve disposed between said conduit and said outlet port, said outlet valve being operable to selectively inhibit or permit gaseous fuel to flow
10 from said conduit to said outlet port, said outlet valve being movable between a gaseous fuel flow inhibiting position and a gaseous fuel flow permitting position in response to movement of said actuator; and

a controller connected in signal communication with said actuator, said controller being configured to maintain a desired pressure magnitude at said outlet
15 port.

11. The regulating system of claim 10, wherein:

said controller is a microprocessor which is connected in signal communication with said actuator, said microprocessor being configured to
20 provide a signal to said actuator to control the movement of said outlet valve between said gaseous fuel flow inhibiting and said gaseous fuel flow permitting positions.

12. The regulating system of claim 11, wherein:

25 said signal is a pulse width modulated signal comprising a plurality of pulses.

13. The regulating system of claim 11, further comprising:

a pressure sensor disposed in pressure sensing relation with said outlet port, said pressure sensor being connected in signal communication with said microprocessor.

5

14. The regulating system of claim 13, wherein:

said signal is a function of a pressure magnitude within said outlet port.

15. The regulating system of claim 14, wherein:

10 said inlet valve is configured to meter a flow of said gaseous fuel from said inlet port at a first pressure magnitude into said conduit at a second pressure magnitude; and

15 said outlet valve is configured to meter a flow of said gaseous fuel from said conduit at said second pressure magnitude into said outlet port at a third pressure magnitude.

16 The regulating system of claim 15, wherein:

said controller is configured to maintain said third pressure magnitude generally equal to said desired pressure magnitude.

20

17. A gaseous fuel pressure regulating system, comprising:

an inlet port;

a conduit connected in fluid communication with said inlet port;

an outlet port connected in fluid communication with said conduit;

25

an actuator;

an inlet valve disposed in fluid communication between said inlet port and said conduit;

an outlet valve disposed between said conduit and said outlet port, said outlet valve being operable to selectively inhibit or permit gaseous fuel to flow from said conduit to said outlet port, said outlet valve being movable between a gaseous fuel flow inhibiting position and a gaseous fuel flow permitting position in response to movement of said actuator; and

a microprocessor connected in signal communication with said actuator, said microprocessor being configured to maintain a desired pressure magnitude at said outlet port, said microprocessor being connected in signal communication with said actuator, said microprocessor being configured to provide a signal to said actuator to control the movement of said outlet valve between said gaseous fuel flow inhibiting and said gaseous fuel flow permitting positions.

18. The regulating system of claim 17, wherein:

said signal is a pulse width modulated signal comprising a plurality of pulses.

19. The regulating system of claim 17, further comprising:

a pressure sensor disposed in pressure sensing relation with said outlet port, said pressure sensor being connected in signal communication with said microprocessor, said signal being a function of a pressure magnitude within said outlet port.

20. The regulating system of claim 19, wherein:

said inlet valve is configured to meter a flow of said gaseous fuel from said inlet port at a first pressure magnitude into said conduit at a second pressure magnitude; and

said outlet valve is configured to meter a flow of said gaseous fuel from said conduit at said second pressure magnitude into said outlet port at a third pressure magnitude, said microprocessor being configured to maintain said third pressure magnitude generally equal to said desired pressure magnitude.

5

10